

Work Order ID 161874***161874***

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Tuesday, May 23, 2017 10:59:38 AM

Item ID: D4709-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Spring Clip
Start Date: 5/26/2017 Start Qty: 12.00 ***12*** Cust Item ID:
Required Date: 5/31/2017 Req'd Qty: 12.00 ***12*** Customer:
Reference:

Approvals: Process Plan:  Date: MAY 24 2017 Tooling: Date: Run Start ***NR1***
QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4709	B								

110

0.00

110Waterjet
FLOW CNC Waterjet

Memo

0.36

1-Cut as per Dwg
Dwg Rev: B
Prog Rev: B

2-Deburr if necessary

(12)

05/31/17

120

QC2- Inspect parts off machine FAI/FAIB

0.00

120QC
Quality Control

Memo

0.00

(12)

05/31/17

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong				
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions				
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance				
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect				
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing				
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved				
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing				
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish				
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread				
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence				
Past Expiry Date ☐	☐ Manufacturing Process	OTHER :							
Misidentified ☐	☐ Past Due								

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00				12			DAS 38 9-89 JUN 01 2017
140 *140* Brake NC Brake NC	Form as per dwg Memo	0.13 0.55			DAS 30 9-89				JUN 06 2017
150 *150* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00				12			DAS 38 9-89 JUN 06 2017

DQA: _____ Date: _____



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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
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Misidentified ☐	Past Due ☐																																																														

Work Order ID 161874

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Page 3

Item ID: D4709-1 Accept ***N9000040100*** Setup Start ***NS1***
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Identify as per dwg & Stock Location: <u>85/20</u>	0.00							
160									
Packaging	Memo	0.00							
Packaging									
170	QC21- Final Inspection - Work Order Release	0.00							
170									
QC	Memo	0.00							
Quality Control									

12x,  JUN 07 2017

17/6/12 

 JUN 07 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																

Picklist Print

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T

Work Order ID: 161874

161874

Parent Item: D4709-1

D4709-1

Parent Item Name: Spring Clip

Start Date: 5/26/2017

Required Date: 5/31/2017

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP REV:A 12.09.11 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M301S22GA		Purchased	No			110	sf	3.9000	0.01	0.126316			
M301S22GA									**			05/31/17	
301 SS Sheet - Full hard McMaster p/n: 3543T77													

Location

Loc Qty

Loc Code

MAT020

3.9

M132831

0.9

M133692

3

.2

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



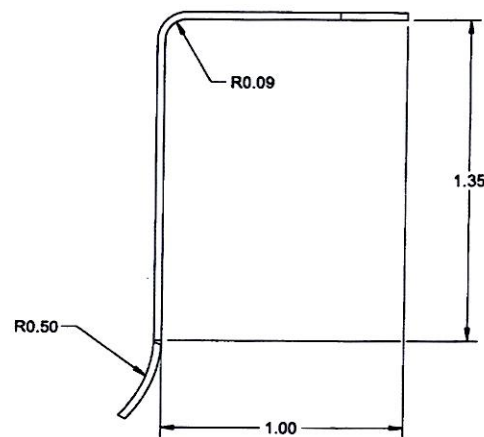
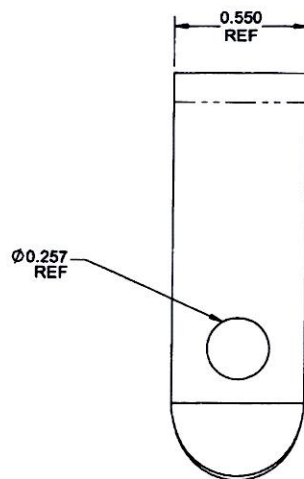
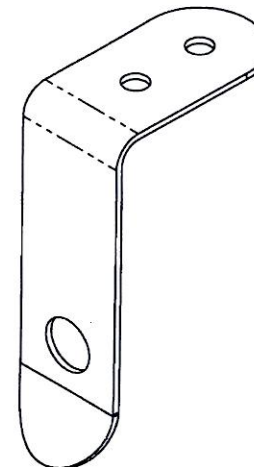
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Misidentified ☐	Past Due ☐																																																																

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 161874

MAY 24 2017

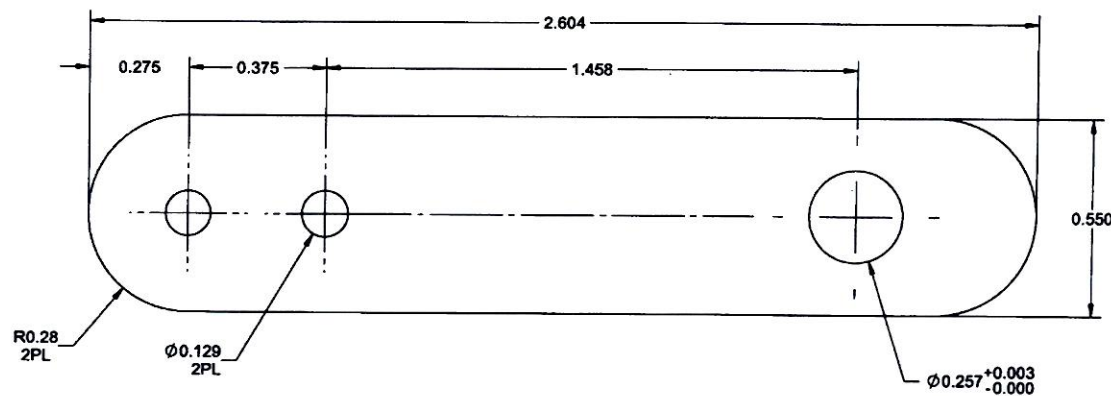


D4709-1 SPRING CLIP

RELEASED
2012-12-06
mt

- NOTES:**
- 1) MATERIAL: MAKE FROM D4709-1F
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4709-1" AND B/N "BXXXXX" PER QSI 044 6.7
 - 7) WEIGHT: 0.01 lbs

B	MATERIAL NOW AISI 301 STAINLESS STEEL (FULL HARD CONDITION), THICKNESS NOW 0.031 THK (C2-2).	AP	12.11.22
A	NEW ISSUE	RP	12.09.19
REV.	DESCRIPTION	BY	DATE
DESIGN	RP	DART AEROSPACE USA, INC. KENT, WA	
DRAWN	AP		
CHECKED	RP	DRAWING NO.	REV.
MFG. APPR.		D4709	SHEET 1 OF 2
APPROVED		TITLE	SCALE
DE APPR.		SPRING CLIP	NTS
DATE	12.11.22	COPYRIGHT © 2012 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT IT	



D4709-1F SPRING CLIP

RELEASED
2012-12-06

- NOTES:**
- 1) MATERIAL: AISI 301 STAINLESS STEEL SHEET PER AMS 5519 OR ASTM 666 (FULL HARD) $\triangle B$
REF DART SPEC M301S22GA
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: N/A

DESIGN	RP	DART AEROSPACE USA, INC.	
DRAWN	AP	KENT, WA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D4709	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		SPRING CLIP	NTS
DATE	12.11.22	COPYRIGHT © 2012 BY DART AEROSPACE USA, INC.	
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